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- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

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(54) Title: SCRATCH AND MAR RESISTANT SOFT ETHYLENE ELASTOMER COMPOSITIONS

(57) Abstract: A soft ethylene elastomer composition imparting improved scratch and mar resistance properties is provided wherein the composition comprises a soft ethylene elastomer component and an effective amount of a filler, preferably mica, a silicone and a compatibilizer to impart improved scratch and mar resistance properties of the composition while not significantly decreasing the softness of the composition or increasing the gloss of the composition.

INTERNATIONAL SEARCH REPORT

International Application No

PCT 03/01599

A CLASSIFICATION OF SUBJECT MATTER
IPC 7 C08K3/34 C08L23/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C08K C08L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 98/32795 A (DUPONT DOW ELASTOMERS LLC) 30 July 1998 (1998-07-30) cited in the application	1,3-6, 11-17, 19, 58-62, 64-66 7,18,63
Y	abstract; claims 1-12 page 28, lines 2,14 page 12, line 24 page 14, line 21 page 15, line 13	
Y	US 5 731 376 A (GRASMEDER JOHN RUSSELL) 24 March 1998 (1998-03-24) abstract; claims 1-6	18,63
Y	US 6 287 681 B1 (DAS AMITABH ET AL) 11 September 2001 (2001-09-11) abstract; claims 1-18 column 1, lines 40-56	7

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

12 February 2004

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA 03/01599

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ As required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1, 3-7, 11-19, 58-66 (partially)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1,3-7,11-19,58-66 (partially)

A composition comprising a soft ethylene elastomer component and a filler. A process for preparing said composition and article of manufacture.

2. claims: 2-19 (partially),58-66(partially)

A composition comprising a soft ethylene elastomer component, a filler (mica), and a compatibiliser. A process for preparing said composition and article of manufacture.

3. claims: 20-29,41-44,58-66(partially)

A composition comprising a soft ethylene elastomer component, a filler (mica), and a silicone compound. A process for preparing said composition and article of manufacture.

4. claims: 30-44 (partially),58-66(partially)

A composition comprising a soft ethylene elastomer component, a filler, a compatibiliser, and a silicone compound. A process for preparing said composition and article of manufacture.

5. claims: 2-19,(partially),45-57 (partially)

A process for preparing a composition using a master batch, wherein said composition comprising a soft ethylene elastomer component, a filler (mica), and a compatibiliser.

6. claims: 30-44 (partially),45-57(partially)

A process for preparing a composition using a master batch, wherein said composition comprising a soft ethylene elastomer component, a filler, a compatibiliser, and a silicone compound.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/CA 03/01599

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